



Specifications: CM-EZ-II

Tile bridge included

System Type	8" Coax, open-ceiling, sealed (20 Watt transformer for 25/70.7/100 Volt or 8 ohm direct)
Impedance (nominal) ¹	8 ohm
Sensitivity dB @ 2.83V/1M	93.0dB
Sensitivity dB @ 1W/1M ²	93.0dB
Distance Factor	N/A
Frequency Response (-3 dB) ³	76 Hz - 22 kHz
Frequency Response (-10 dB) ³	54 Hz - 22 kHz
Max. Program Power ⁴	80w
Max. Continuous Power RMS ⁵	40w
Max. UL program power	40w
Max. Power SPL @ 1 M ⁶	109.0dB
Max. SPL @ x% distortion ⁷	N/A
Coverage Angle (-6 dB @ 2 kHz)	100°
Coverage Angle (-6 dB @ 10 kHz)	65°
Directivity Factor (Q)	6.09 Avg. 100 Hz @ 10 kHz; 7.33 @ 2 kHz
Directivity Index (DI) dB	6.2dB Avg. 100 Hz @ 10 kHz; 8.7dB @ 2 kHz
Tap Selector	6-Position rotary switch with 8 ohm direct
Transducer - Low Frequency Driver	203mm (8in) Polypropylene cone, butyl rubber surround
Transducer - High Frequency Driver	25mm (1in) Polypropylene dome tweeter
Low Frequency Voice Coil	25.4mm 1.00in
Crossover Frequency	5.6kHz
Network Type: Low Pass	6dB per octave, 1st order
Network Type: High Pass	6dB per octave, 1st order
Enclosure Material	Drawn steel backcan with ABS baffle
Motor-board	N/A
Grille	Iridite-plated steel with powder-coat finish
Inputs	18-Gauge hard wired leads
Colors	Black or white
Backcan Diameter	9.13 in / 231.8 mm
Backcan Height	7.50 in / 190.5 mm
Visible Diameter	10.75 in / 273.1 mm
Visible Height	0.20 in / 5.1 mm
Mounting Hole Diameter	9.75 in / 247.7 mm
Min / Max Ceiling Thickness	0.50 in / 12.7 mm - 0.75 in / 19.1 mm
Weight	7.0 lb / 3.2 kg
Shipping Weight	7.9 lb / 3.6 kg

Accessories

Included	Tile bridge, UL listed flex conduit clamp, paint shield
Optional	Pre-Construction Bracket (AC-CM-EZ-PCB)
Packaging	1 per box

¹ Impedance listed per IEC 60268-5

² 1w1m sensitivity determined using nominal impedance

³ Frequency response measured in half or full space as dictated by speaker mounting configuration

⁴ Max program power is 3 dB above max continuous power

⁵ Continuous power rating, EIA-426-B test

⁶ Max output based on max continuous power

⁷ Max useable SPL based on testing by NWA Labs

Transformer Taps

70.7 V	Output	100 V	Output	25 V	Output
	20w 106.0dB		20w 106.0dB		2.5w 97.0dB
	10w 103.0dB		10w 103.0dB		1.3w 94.0dB
	5w 100.0dB		5w 100.0dB		0.63w 91.0dB
	2.5w 97.0dB		2.5w 97.0dB		
	1.25w 94.0dB				

Key Features

- SnapCam™ 4-point, spring-loaded system for rapid installation.
- One 203 mm (8 in) Polypropylene cone with butyl rubber surround and one 25 mm (1 in) polypropylene balanced-dome tweeter with FerroFluid™.
- Integrated backcan and 25/70.7/100 Volt and 8 Ohm tap settings for ease of ordering, stocking and installation.
- Quick release mechanism for easy servicing.
- UL/c, UL 1480 & 2043, CE (EMC Directive 89/366/EEC, EN55020, EN55013) approved.
- Adaptable to material thicknesses ranging from 1/2 in (12.70 mm) to 3/4 in (19.05 mm).

Description

The CM-EZ-II is a 2-way blind-mount in-ceiling speaker. The CM-EZ-II speaker design incorporates an 8" polypropylene driver with rubber surround and a 7.3 liter steel backcan for extended frequency response (54 Hz – 22 kHz, - 10 dB). SoundTube's integrated CM-EZ-II design includes unique & patented blind mount SnapCam™ installation technology and a 21-gauge steel tile bridge ensuring rapid and secure installation in any sheetrock or drop-tile ceiling. For easy ordering, stocking and installation, the CM-EZ-II comes with a 6-position tap switch for 25, 70.7 & 100 V applications with voice coil/8 Ohm bypass.

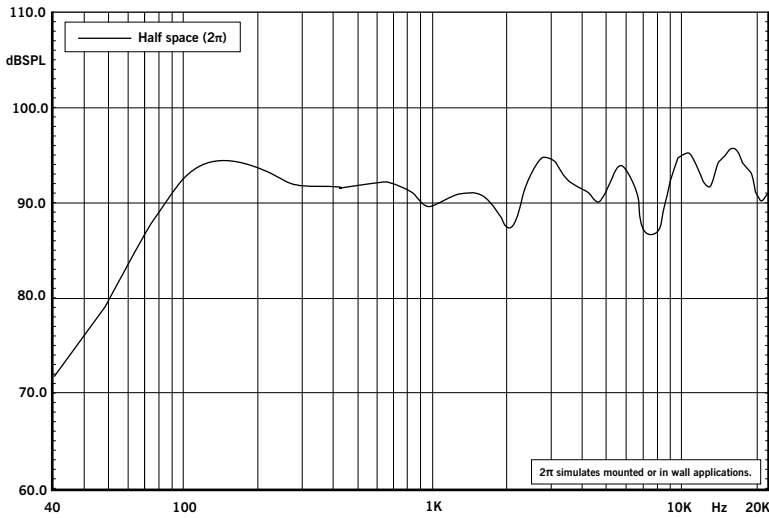
Applications

Engineered for general background to foreground music & paging applications, the CM-EZ-II is ideal for retail stores, restaurants, airports, churches, conference centers & boardrooms.

Patented SoundTube Technologies

SoundTube Entertainment is constantly developing new technologies that enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. & international patents, which explicitly cover SoundTube dome, enclosure and dispersion technologies. SoundTube Entertainment actively defends its patents in order to protect SoundTube resellers and end users.

Frequency Response



Technical Data and Specification Tools

Technical Data

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are available from SoundTube Entertainment or at www.soundtube.com.

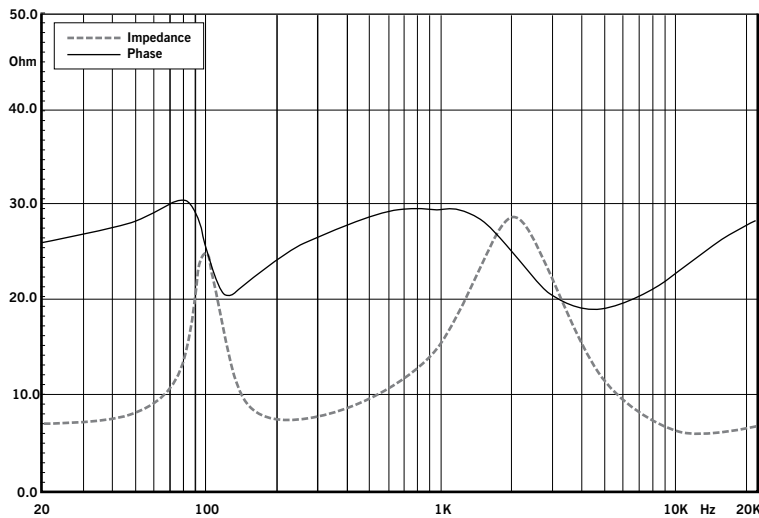
Data Acquisition

All performance data acquired at SoundTube's Technical Measurement Center (TMC) are analyzed using a variety of standard measurement techniques, including Measured Length Sequence (MLS) and Time Delay Spectrometry (TDS). Performance, development and data acquisition tools include: Gold Line TEF 20, CLIO, LMS, LEAP, and proprietary modeling software. EASE™ data are acquired through an automated TEF 20/Outline/EASE™ interface.

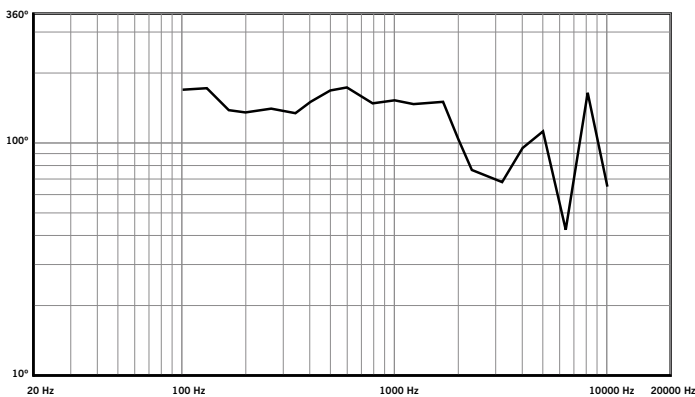
EASE™ Data – 3-D polar plots.

SoundTubeSPECT™ – Proprietary SoundTube speaker placement software.

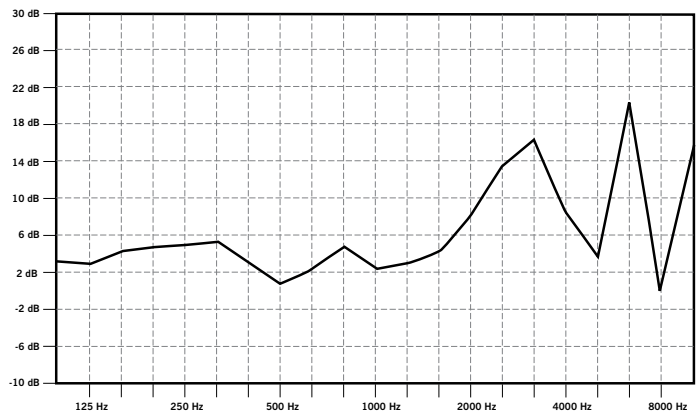
Phase/Impedance Reponse



Beamwidth (-6dB)



Directivity Index (DI)



Architectural Specifications

The loudspeaker shall consist of a 203 mm (8 in) low-frequency transducer and one 25 mm (1 in) high-frequency transducer with a frequency dividing network installed in a sealed enclosure. The low-frequency voice coil diameter shall be 25 mm (1 in).

Performance specifications of a typical production unit shall be as follows: Usable frequency range shall extend from 54 Hz - 22 kHz. The loudspeaker shall be available with selectable 25/70.7/100 Volt and 8 Ohm/voice coil direct tap switch. The frequency-dividing network shall have a crossover frequency of 5.6 kHz. Rated power capacity of the components and network shall be at least 40 Watts continuous RMS power.

Designed for both 25/70.7/100 Volt and 8 Ohm/voice coil direct applications, the CM-EZ-II is factory preset to the 70.7 at 20 Watts operating mode, with a tap switch located on the backcan.

The backcan shall be constructed of zinc-plated steel with an ABS plastic bezel. The grille shall be constructed of powder-coated steel. The low-frequency transducer shall have a polypropylene cone material with butyl rubber surround. The high-frequency transducer shall be constructed of polypropylene material using a balanced-dome configuration.

Packaged complete with UL-listed flex conduit clamp, tile bridge, grille, cut-out template and paint shield, the integrated CM-EZ-II open-ceiling speaker is engineered for high performance and rapid installation in plenum spaces. The CM-EZ-II incorporates a secondary attachment bolt for added security, or where required by code.

The CM-EZ-II installation shall be by 4-point blind-mount system using spring-loaded cams and a tile bridge. The CM-EZ-II's spring-loaded cams are adaptable to stable surfaces including drop tile and sheetrock with material thicknesses ranging from 1/2 in (12.70 mm) to 3/4 in (19.05 mm). For

surfaces thicker than 5/8 in (15.87 mm), proper installation requires removing the rubber feet on the cam mechanisms. Refer to the CM-EZ-II Pre-Construction Bracket Installation Instructions at www.soundtube.com.

The system shall be the SoundTube CM-EZ-II for both low & high impedance applications.

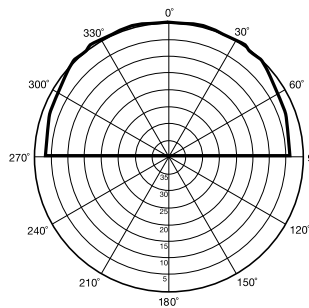
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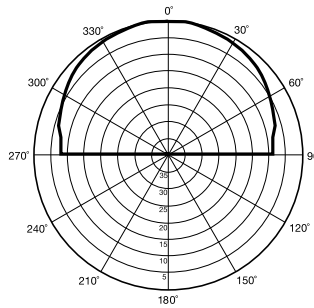
All SoundTube products come with a 5-year limited warranty.

Polar Plots

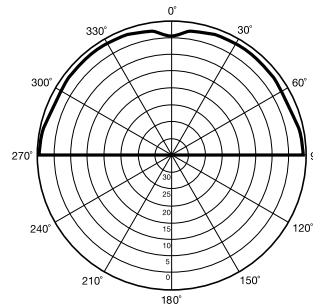
125 Hz



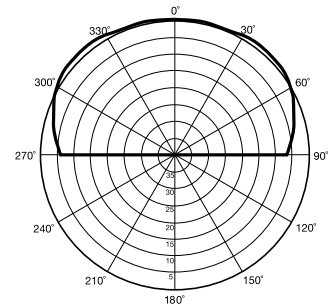
250 Hz



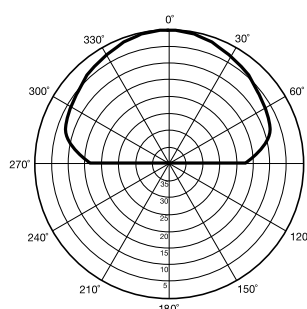
500 Hz*



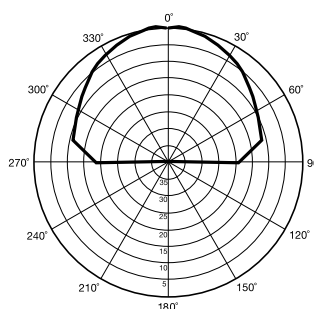
1,000 Hz



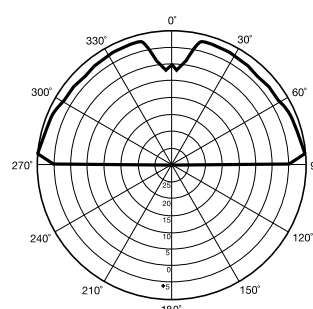
2,000 Hz



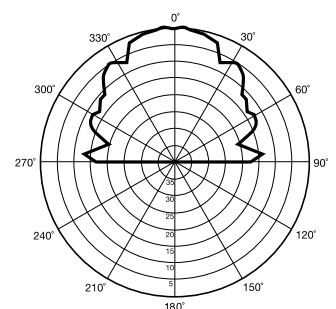
4,000 Hz



8,000 Hz*



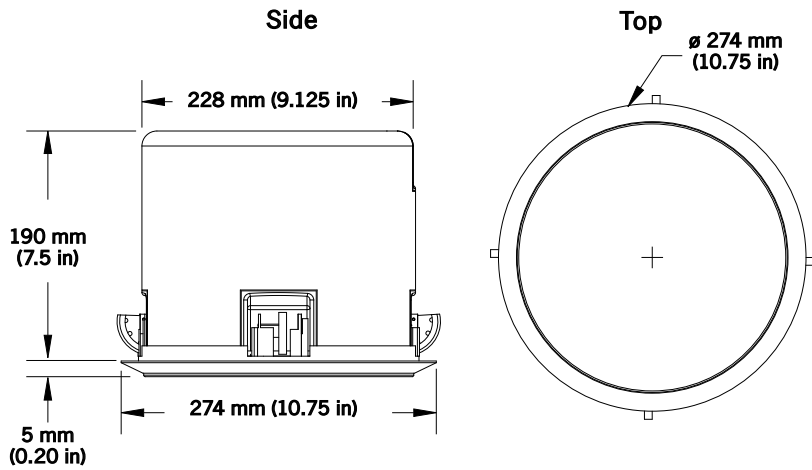
10,000 Hz



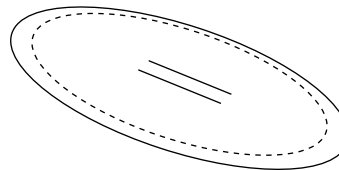
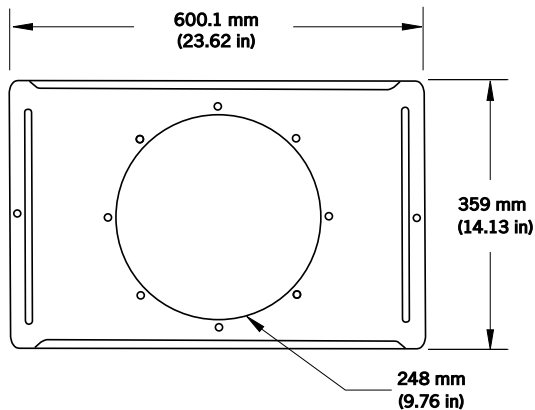
*Polar response is normalized to allow proper interpretation of data.



Mechanical Drawings

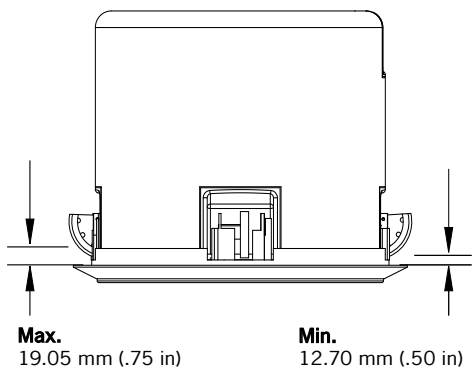


Included Accessories

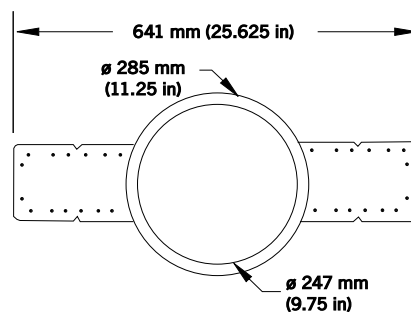


Tile Bridge

Paint shield



Optional Accessory



Snap-cam Mounting System

Pre-Construction Bracket (AC-CM-EZ-PCB)